

CLAIMS

What is claimed is:

1. A method, comprising the steps of:
detecting voice activity on at least one of a receive and a transmit channel in
5 a communications system;
outputting voicing decision outputs based on the step of detecting;
storing the voicing decision outputs over a period of time to memory; and
generating a voice activity performance metric based on the voicing
decision output stored in the memory.
- 10 2. The method of claim 1, wherein the step of generating includes generating a
running average ratio of duration of voice activity on the transmit channel to duration of
voice activity on the receive channel over a predetermined period of time.
3. The method of claim 2, wherein the predetermined period of time is selected
from the group consisting of a duration of a telephone call over the communications
15 system, a work shift, a work day, a week, a month, a year, and a predetermined number
of days.
4. The method of claim 1, wherein the step of generating includes generating
an average ratio of duration of voice activity on the transmit channel to duration of voice
activity on the receive channel for each communications system agent.

5. The method of claim 1, wherein the performance metric facilitates detecting at least one of voice strain, stress, and excessive doubletalk.

6. The method of claim 1, further comprising the step of comparing a ratio of duration of voice activity on the transmit channel to duration of voice activity on the receive channel to a target ratio.

7. The method of claim 1, further comprising the step of outputting the voice activity performance metric to a display.

8. The method of claim 1, wherein the step of detecting is performed throughout an active call via the communications system.

9. The method of claim 1, wherein the step of detecting includes detecting voice activity on both the receive channel and the transmit channel in the communications system.

10. The method of claim 1, wherein the step of detecting includes detecting voice activity on only the transmit channel in the communications system and wherein the step of generating includes generating ratios of duration of voice activity to duration of no voice activity on the transmit channel.

11. The method of claim 1, further comprising the step of automatically routing calls based at least in part on the voice activity performance metric.

12. A system, comprising:

a voice activity detector (VAD) configured to detect voice activity on at least one of a receive and a transmit channel in a communications system;

a memory to store outputs from the VAD; and

5 a voice activity analyzer in communication with the memory, the voice activity analyzer being configured to generate a performance metric based on the VAD outputs stored in the memory.

13. The system of claim 12, wherein the voice activity analyzer is further configured to generate a running average ratio of duration of voice activity on the
10 transmit channel to duration of voice activity on the receive channel over a predetermined period of time.

14. The system of claim 13, wherein the predetermined period of time is selected from the group consisting of a duration of a telephone call over the communications system, a work shift, a work day, a week, a month, a year, and a
15 predetermined number of days.

15. The system of claim 12, wherein the voice activity analyzer is further configured to generate an average ratio of duration of voice activity on the transmit channel to duration of voice activity on the receive channel for each communications system agent.

16. The system of claim 12, wherein the voice activity analyzer is further configured to compare a ratio of duration of voice activity on the transmit channel to duration of voice activity on the receive channel to a target ratio.

17. The system of claim 12, wherein the performance metric facilitates detecting
5 at least one of voice strain, stress, and excessive doubletalk.

18. The system of claim 12, further comprising a display wherein the voice activity analyzer is further configured to output the voice activity performance metric to the display.

19. The system of claim 12, wherein the VAD is configured to detect voice
10 activity throughout an active call via the communications system.

20. The system of claim 12, wherein the VAD is further configured to detect voice activity on both the receive channel and the transmit channel in the communications system.

21. The system of claim 12, wherein the VAD is further configured to detect
15 voice activity on only the transmit channel in the communications system and wherein the voice activity analyzer is further configured to generate ratios of duration of voice activity to duration of no voice activity on the transmit channel.

22. The system of claim 12, further comprising an automatic call routing system in communication with the voice activity analyzer, the automatic call routing system being configured to automatically route calls based at least in part on the performance metric.